

Name \_\_\_\_\_ Period \_\_\_\_\_ Date \_\_\_\_\_



## Galaxy

## STEM Sims

### Lesson 3: Testing the Galaxy

Since visiting the parts of the universe outside our immediate solar system is currently out of the question, astronomers must use various devices to study these far-away objects. In this simulation, you'll use your results from Lesson 1 along with a variety of tools to identify an unknown astronomical object. Look closely and behold the universe!

#### Doing the Science

1. Start the Galaxy Simulation by clicking on the "Sim" tab.
2. Note and record in Table 1 the 12-character Unknown Object code that appears in the upper right-hand corner of the screen.
3. A given astronomical object appears in the middle of the screen using a view that measures X-rays emitted by the object.
4. Note and record in Table 1 the appearance of the object.
5. Next, select the next view of the same object (ultraviolet) and enter this information in Table 1.
6. Complete a similar process with the remaining three views (visible, infrared, and radio). Make sure to enter your information in Table 1.
7. Select the Spectral Scanner button on the right-hand side of the screen. Note and record in Table 1 the most abundant elements present in the object.
8. Using your information collected in Lesson 1 and your results recorded in Table 1, record in the bottom of Table 1 the name of the Astronomical Object that you think you studied.

Table 1. **Unknown Object Code =**

View	Your Notes
X-Rays	
Ultraviolet	
Visible	
Infrared	
Radio	
Spectral Scanner	
<b>Astronomical Object You Studied</b>	

